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10/723,320

11/25/2003

Warren P. Heim

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09/12/2006

HANSEN HUANG TECHNOLOGY LAW GROUP, LLP
1725 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20006

EXAMINER

PEFFLEY, MICHAEL F

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,320

Applicant(s)

HEIM ET AL.

Examiner

Michael Peffley

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-25 and 27-36 is/are rejected.
7) ☒ Claim(s) 26 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's amendments and comments, received July 28, 2006, have been fully considered by the examiner. In particular, applicant's corrected Figure 16A is acceptable and is deemed to overcome the drawing objection. The following is a complete response to the July 28, 2006 communication.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-4, 14-17, 21-23, 27-32, 35 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Eggers et al (5,891,095).

Eggers et al disclose an electrosurgical assembly comprising an output assembly (26) connectable with a generator (Figure 16), an active electrosurgical element (12) including one or more active electrodes connected with the output assembly, and a return path element (17) mechanically connected to the active element to define a bipolar configuration. The active element (12) and return element (17) are at different locations on the device and interact with different portions of tissue in use. A first dielectric component (18) interfaces with the patient and surrounds the return element along a substantial portion of its length. The return path element also includes a return assembly (one of the leads connected to plug 26 in Figure 16) for connecting the return element to the generator. The Eggers et al active electrode may be a single electrode or a plurality of electrodes, and the electrode(s) may include a variety of shapes (Figures 12-15). The examiner maintains that the dielectric coating is inherently capable of withstanding the voltages recited in the claims, particularly since Eggers et al

disclose the use of voltages within that range and the dielectric is provided to protect tissue.

With regard to claims 14-17, Eggers et al fail to disclose the specific impedance of the return path element. However, in as much as the return path element is an electrically conductive tubular member made of a conductive metal (col. 11, lines 17-20), it is deemed to inherently possess a very low impedance within the range set forth in these claims.

Claim Rejections - 35 USC § 103

Claims 5-13 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al ('095) in view of the teaching of Long et al (6,106,519).

Eggers et al disclose the use of a dielectric to coat the tubular member that serves as the return electrode, but fails to disclose a specific material that has a dielectric product as set forth in these claims. It is noted that Eggers et al disclose the use of various dielectric materials for making the device, including polyimides and ceramics.

Long et al disclose another bipolar electrosurgical apparatus and specifically teach of the use of Barium Titanate as a dielectric material (col. 5, lines 4-6). In as much as Barium Titanate is the identical material used in the instant application, it is deemed to have identical properties for dielectric constant. Further, the thickness of the insulating layer disclosed by Long et al and/or Eggers et al is deemed to inherently yield a dielectric product as set forth in the claims.

To have used any well known dielectric coating to provide an insulating layer on the Eggers et al device would have been an obvious design consideration for one of ordinary skill in the art, particularly in view of the teaching of Long et al.

Claims 18-20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al ('095) in view of the teaching of Stern (6,413,255).

While Eggers et al disclose a dielectric material (i.e. insulator) surrounding a majority of the return path element, the distal-most portion is left uncovered and energy is not return to the generator "through" the dielectric as set forth in claims 18-20.

Stern discloses another bipolar electrosurgical apparatus that includes active and return electrodes disposed at the distal end of the device. In particular, Stern teaches of providing both the active and return electrodes with a dielectric coating to as to provide a more uniform distribution of energy across the electrode surfaces.

To have provided the Eggers et al device with a dielectric coating on the entire surface of the return electrode to provide a more uniform distribution of the return electrode would have been an obvious modification for one of ordinary skill in the art in view of the teaching of Stern.

Claims 24 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al ('095) in view of the teaching of Goble et al (6,228,081).

Eggers et al fail to specifically disclose the use of a capacitor or a shunt circuit in the return path of the electrosurgical device.

Goble teaches of the known use of isolation capacitors (68) and shunt circuits provided in return paths to better control the delivery of RF energy to an electrode assembly.

To have provided the Eggers et al device with a capacitor and/or shunt circuit in the return path to better control the delivery of energy to/from the generator would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Goble.

Allowable Subject Matter

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed July 28, 2006 have been fully considered but they are not persuasive.

With regard to the 35 USC 102 rejection, the applicant contends that the Eggers et al dielectric is not "a dielectric material as recited in the claims". In particular, applicant points out that the Eggers et al dielectric does not allow energy to pass through it for return to the generator. However, the claims do not define any such dielectric in the claims. Rather, claim 1 merely calls for "a return path element" that comprises "a first dielectric component which interfaces with said patient". Clearly, Eggers et al provide a return path element (17) and a dielectric component (18) which interfaces with the patient by preventing tissue from contacting the inner return tube.

There is nothing in the claim that defines what is meant by the phrase "which interfaces with said patient", and the examiner maintains that a protective coating made of a dielectric material that electrically isolates tissue is "interfacing" with the patient.

Regarding the combination of the teaching of Long with the Eggers device, applicant contends there is no motivation to combine the teaching of Long with Eggers since Eggers teaches away from the use of ceramic dielectrics. The examiner disagrees with this logic. That Eggers may prefer the use of TEFLON or other polymer sheaths is certainly not a discreditation of other known dielectric materials, and the examiner maintains that one of ordinary skill in the art would certainly recognize the advantages associated with using different types of dielectrics, such as ceramics, in the Eggers et al device. It is very well documented in the electrosurgical arts that polymer and ceramic insulations may be interchangeably used as dielectrics on RF devices. Long teaches of the use of barium titanate as a dielectric for its durability, and one of ordinary skill in the art would certainly recognize that such a quality may be advantageously employed on the Eggers device if desired. In fact, Eggers does disclose the equal substitution of polymer, glass, ceramic and other dielectrics in the device (see col. 11, lines 10-15)

Again, applicant contends that there is not motivation to combine the teaching of Stern with the Eggers device and that Stern specifically teaches away from the device disclosed in Eggers. Applicant points out that Stern discloses one advantage of the dielectric coating is the minimization of the need to use a conductive fluid", and Eggers specifically discloses the use of fluid. It is the examiner's position that the Stern

reference remains a viable teaching of providing a dielectric coating on the Eggers device. In particular, such a coating would serve as a safety measure in the instance where there is a potential problem with the flow of fluid in the Eggers device. Stern does not state that there are any disadvantages of using the dielectric coating in a device that provides fluid, only that it presents the advantage of minimizing the need for the presence of a conductive fluid.

Applicant addresses the Goble reference only to the extent that Goble does not cure the alleged deficiency of the Eggers reference with respect to the limitations of claim 1. As asserted previously, the examiner maintains the Eggers reference does teach all the limitations of claim 1, and the combination with the Goble teaching to reject claims 24 and 33 is deemed tenable.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

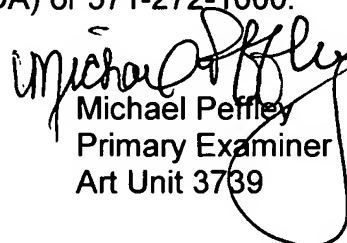
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Michael Peffley
Primary Examiner
Art Unit 3739

mp
September 5, 2006